SOUTH CENTRAL CONNECTICUT
REGIONAL
WATER AUTHORITY

90 Sargent Drive, New Haven, CT 06511-5966 (203)624-6671

May 23, 1985

Ms. Barbara McAllister
Waste Management Division
U. S. Environmental Protection Agency
Region I
Boston, MA 02203

Dear Ms. McAllister:

Enclosed is a copy of a draft agreement for additional testing that we have been discussing with Olin. The agreement contains a list of chemicals that, according to Olin, were handled in significant volumes and may have been disposed of at Pine Swamp. The proposed testing for these and other compounds that would not have been detected by priority pollutant screening includes analysis according to the SW 846 protocol with the Georgia modifications as well as development of analytical procedures specific for the 10 compounds listed. The potential presence of these and possibly other research chemicals on the site is new information that was not available when the previous studies were conducted by ERT, Malcolm Pirnie, or NUS, and raises new concerns about potential impacts on Lake Whitney.

Also enclosed are data from volatile organic chemical analyses performed on samples from the outfall of Pine Swamp into Lake Whitney (WH-B), the raw water intake (WH-A), and treated effluent (WH-T). Tetrachloroethylene, trichloroethylene, dichloroethylene, and trichloroethane have all been identified in surface or groundwater on Pine Swamp. The recent decline in occurrences and concentrations of VOC's may be related to a drop in the water table and changes in hydraulic gradient caused by the present dry conditions.

If you have questions or I can provide you with additional information please don't hesitate to call.

Sincerely,

REGIONAL WATER AUTHORITY

Frances J. Ludwig

Frances J. Ludwig
Manager of Environmental Affairs

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OLIN AND SOUTH CENTRAL CONNECTICUT
REGIONAL WATER AUTHORITY

Agreement Relating
to
Pine Swamp Past Disposal Activities

Because the Authority still has unresolved concerns relative to possible groundwater contamination that may not have been detected by the analytical techniques utilized in the three previous studies, the Authority and Olin agree to conduct jointly a sampling and analytical effort employing procedures not previously used.

This agreement defines: the scope of these joint studies; the arrangement for sharing the sampling and analytical costs; the exact protocols to be employed; the managerial and technical personnel from both parties assigned to this project; and the dissemination of all data and information generated as a result of these efforts.

SCOPE

Samples shall be taken from monitoring wells in the following locations: at the property line where groundwater is discharged from the site; from a location within the actual property in the approximate center of the area used for disposal of industrial trash and R&D Chemicals; and at the discharge of the water treatment plant located on Lake Whitney (see map - Exhibit B). The exact locations and specifications for the monitoring wells are subject to the approval of both parties. Details will be described in Appendix A.

The following tests will be conducted on each sample:

- Modified SW 846 protocol as described in the attached ETC proposal appended to this agreement as Exhibit C.

- Surrogate parameters which were selected because they represent those chemicals that were handled in significant volumes from major categories of activity during the period of interest:

  Toluenediamine
  Trichlorobutylalcohol
  Trichloroethylene
  2-Chloropyridine
  Diethyleneglycolmonoethylether
  Hydrazine
  2,2,2-Trichloro-2',4'-dinitroacetanilide
  Pentachloronitrobenzene
  Lithium
  Boron

NOTE: It is mutually agreed and understood there is no necessary correlation between the quantity of materials handled and the quantity (if any) of these compounds sent to Pine Swamp for disposal.

NOTE: Insert information here generated by Ted Groom and Darrell Smith.

COST SHARING

Olin will pay for all analyses performed on samples collected from Pine Swamp; the Authority will pay for analyses performed on samples from Lake Whitney.

PROCEDURES

As mentioned previously, ETC's proposal and supporting documentation describes the protocol used to analyze for the RCRA Appendix VIII hazardous constituents.

Olin's Ted Groom and the Authority's Darrell Smith will decide on specific sampling and analytical procedures to be employed when testing for the surrogate parameters. This information will be summarized and appended to this document as Exhibit D.

Cost estimates for all sampling and analytical work will be developed in advance. Review and approval by both parties must be obtained before proceeding with any work. Purchase orders and payments for services will be issued by Olin. The Authority will reimburse Olin within 60 days of receiving evidence of payment for authorized services.

Olin's Paul Duff and the Authority's Fran Ludwig will be the principal contacts for their respective firms.

INFORMATION DISSEMINATION

Olin and the Authority agree to release jointly, after appropriate review and approval, all data developed as a result of this cooperative technical effort directly to the Connecticut DEP, the Connecticut Department of Health Services, and EPA Region I.

Contracts, correspondence with either state or federal regulatory agencies, media releases, and other dissemination of information must be reviewed and approved by both principal contacts prior to release. Approval will not be unreasonably withheld.

Exhibit "D"

Analytical Procedure for the Surogate Parameters

COMPOUND	METHOD
TOLUENEDIAMINE	GC with P/N detector or GC/MS
TRICHLOROBUTYALCOHOL	To be determined
TRICHLOROETHYLENE	GC/MS (priority pollutant protocol)
2-CHLOROPYRIDINE	Capillary GC with ECS or GC/MS
DIETHYLENE GLYCOL MONOETHYLETHER	To be determined
HYRAZINE	HPLC with ultraviolet or florescense detectors
PENTACHLOROBENZENE	GC/MS (priority Pollutant protocol)
2, 2, 2, trichloro 2' 4' DINITROACETANILIDE	To be determined
BORON	ATOMIC ADSORPTION (priority pollutant protocol)
Lithium	

Battery
DISPOSAL
AREA
site
WATER
INTAKE
H A M D E N
N E W H A V E N
Spring Glen
Lake
Whitney
Quinnipiac College
PENN CENTRAL
Blessed Sacrament Sch
Churchill Sch
Hamden Plains Cem
Helen St Sch
Library
New Haven Country Club
St Stevens Sch
Bassett Park
Putnam Ave Sch
Whitneyville
Eli Whitney Technical Sch
Keefe Sch
Hamden Hall Sch
Whalen Jr High Sch
Newhall Sch
Mill Rock
Filtration Plant
State St Sch
Sinai Scholom Cem
Southern Connecticut State College
Albertus Magnus College
Bassett Jr High Sch
Ivy St Sch
East Rock
Indian Head
Snake Rock
Bowen Field
Beecher Sch
Westville Cem
Hillhouse High Sch
St Mary's Sch
Sterling Sch
Hooker Sch
Armory
Cross High Sch
Winchester Sch
Baldwin Sch
St Brendan's Sch
Sherman Sch
Grant Sch
St Martins Sch
Edwards St Sch
Lovell Sch
Troup Jr High Sch
Dwight Sch
YALE UNIVERSITY
Hospital
Barnard Sch
YMCA
YWCA
St Marys High Sch
St Stanislaus Sch
St Boniface Sch
Cheever Sch
Fair Haven
INTERCHANGE
Quarry
Park